polyethylene, nylon, olefin, polyester, rayon, spandex, carbon, polybenzimidazole, and combinations of the above. Useful open-cell plastics include: polyamides, polyimides, polyesters, polyisocyanurates, polyisocyanates, polyurethanes, poly(vinyl alcohol), etc. Useful open-celled plastic (foams) suitable for use with the compositions of the invention include: open and non-opened cell silicone, polyurethane, polyethylene, neoprene, polyvinyl chloride, polyimide, metal, ceramic, polyether, polyester, polystyrene, polypropylene. Example of such foams are: Thanol®, Arcol®, Ugipol®, Arcel®, Arpak®, Arpro®, Arsan®, Dylite®, Dytherm®, Styrofoam®, Trymer®, Dow Ethafoam®, Ensolite®, Scotfoam®, Pyrell®, Volana®, Trocellen®, Minicel®, and the like. ---

IN THE CLAIMS

Please amend the claims as follows:

1. (thrice amended) A cold weather wear for protecting parts of a body against cold comprising: a footwear, a sock, a face mask, a glove and a body suit for protection of one or more selected areas of said body including the head, face, forehead, eyes, ears, nose, neck, hand, fingers, arms, underarm, torso, and back; said cold weather wear made from

(I) one or more layers of a crystal gel, [(Gn)] G_n, comprising:

(i) 100 parts by weight of at least one or more a linear, multi-arm, branched, or star shaped block copolymer or a mixture thereof, said block copolymer having one or more substantially crystalline poly(ethylene) midblock in combination with one or more amorphous midblocks of poly(butylene), poly(ethylene-butylene), poly(ethylene-propylene) or a combination thereof,

(ii) about 300 to about 1,600 parts by weight of a plasticizing oil; in combination with or without

(II) at least one layer of an insulating gel formed from said

(i) crystal gel, [(Gn)] G_n, in combination with

(iii) a selected amount of one or more heat expandable plastic or synthetic particulates of material so as to form a homogeneous or non-homogeneous closed cell particulate gel dispersion, [(GnMm)] G_nM_m, wherein said crystal gel Gn having a gel rigidity of from about 20 to about 1,000 gram Bloom, said gel dispersion, [(GnMm)] G_nM_m, having a gel rigidity of from 50 to about 3,000 gram Bloom, said crystal gel, Gn, and said gel dispersion, [(GbMm)] G_nM_m, having an elongation of at least 200%, said crystal gel or crystal gel dispersion, [(GnMm)] G_nM_m, capable of being formed in adhering contact with each other, another crystal gel dispersion or physically interlocked with a selected substrate material, [(Mn)] M_n, to form one or more combinations of a crystal gel-substrate, crystal gel dispersion substrate, or crystal gel-substrate/crystal gel dispersion composites including a non-composite of a crystal gel dispersion alone, or a sequential addition or permutation of said combinations of [(GnMm), (GnMm)(GnMm), (GnMm)Gn, Mn(GnMm), MnMn(GnMm), MnGnGn(GnMm), MnMnMn(GnMm), including MnGn(GnMm), (GnMm)GnMn, Gn(GnMm)Gn, Mn(GnMm)Mn, Mn(GnMm)Gn, (GnMm)GnGn, (GnMm)MnGn, Gn(GnMm)GnMn, (GnMm)GnMnMn, (GnMm)GnMnGn, (GnMm)MnGnGn, GnGn(GnMm)Mn, MnGn(GnMm)Gn, Mn(GnMm)(GnMm), Gn(GnMm)MnMn, (GnMm)Mn(GnMm), GnGn(GnMm)GnGn, Mn(GnMm)(GnMm)Gn, Gn(GnMm)MnGn, Gn(GnMm)(GnMm)Gn, (GnMm)(GnMm)(GnMm), (GnMm)MnGn(GnMm), MnGn(GnMm)(GnMm),

Gn(GnMm)MnGnGn, MnMnGn(GnMm)Mn, MnGn(GnMm)(GnMm), MnGn(GnMm)GnGn, Gn(GnMm)Gn(GnMm), (GnMm)(GnMm)Gn, MnMnMn(GnMm)MnMn, Mn(GnMm)Gn(GnMm), Mn(GnMm)(GnMm)MnGn, (GnMm)Mn(GnMm)MnGn, MnGn(GnMm)Gn(GnMm), MnGn(GnMm)Gn(GnMm),(GnMm)(GnMm)(GnMm)Gn, Gn(GnMm)MnGn(GnMm)Mn, Gn(GnMm)Gn(GnMm)GnGn, (GnMm)(GnMm)(GnMm)(GnMm), (GnMm)Gn(GnMm)Gn(GnMm)Gn, Gn(GnMm)(GnMm)(GnMm)GnGn, or (GnMm)(GnMm)(GnMm)(GnMm)(GnMm)Gn,] (G_nM_m), $(G_nM_m)(G_nM_m)$, $(G_nM_m)G_n$, $M_n(G_nM_m)$, $M_nM_n(G_nM_m)$, $M_nG_nG_n(G_nM_m)$, $M_nM_nM_n(G_nM_m)$, including $M_nG_n(G_nM_m)$, $(G_nM_m)G_nM_n$, $G_n(G_nM_m)G_n$, $M_n(G_nM_m)M_n$, $M_n(G_nM_m)G_n$, $(G_nM_m)G_nG_n$, $(G_nM_m)M_nG_n$, $G_n(G_nM_m)G_nM_n$, $(G_nM_m)G_nM_nM_n$, $(G_nM_m)G_nM_nG_n$, $(G_nM_m)M_nG_nG_n$, $G_nG_n(G_nM_m)M_n$, $M_nG_n(G_nM_m)G_n$, $M_n(G_nM_m)(G_nM_m)$, $G_n(G_nM_m)M_nM_n$, $(G_nM_m)M_n(G_nM_m)$, $G_nG_n(G_nM_m)G_nG_n$, $M_n(G_nM_m)(G_nM_m)G_n$, $G_n(G_nM_m)M_nG_n$, $G_n(G_nM_m)(G_nM_m)G_n$, $(G_nM_m)(G_nM_m)(G_nM_m)$, $(G_nM_m)M_nG_n(G_nM_m)$, $M_nG_n(G_nM_m)(G_nM_m)$, $G_n(G_nM_m)M_nG_nG_n$, $M_nM_nG_n(G_nM_m)M_n$, $M_nG_n(G_nM_m)(G_nM_m)$, $M_nG_n(G_nM_m)G_nG_n$, $G_n(G_nM_m)G_n(G_nM_m)$, $(G_nM_m)(G_nM_m)G_n$, $M_nM_nM_n(G_nM_m)M_nM_n$, $M_n(G_nM_m)G_n(G_nM_m)$, $M_n(G_nM_m)(G_nM_m)M_nG_n$, $(G_nM_m)M_n(G_nM_m)M_nG_n$, $M_nG_n(G_nM_m)G_n(G_nM_m)$, $M_nG_n(G_nM_m)G_n(G_nM_m)$,$(G_nM_m)(G_nM_m)(G_nM_m)G_n$, $G_n(G_nM_m)M_nG_n(G_nM_m)M_n$, $G_n(G_nM_m)G_n(G_nM_m)G_nG_n$, $(G_nM_m)(G_nM_m)(G_nM_m)(G_nM_m)$, $(G_nM_m)G_n(G_nM_m)G_n(G_nM_m)G_n$, $G_n(G_nM_m)(G_nM_m)(G_nM_m)G_nG_n$, or $(G_nM_m)(G_nM_m)(G_nM_m)(G_nM_m)(G_nM_m)G_n$, where when n is a subscript of G, n denotes the same or different gel rigidity; where when n is a subscript of M, n denotes the same or different material of foam, plastic, fabric, knit fabric, yarn knit fabric, metal, wood, glass fiber, ceramics, synthetic resin, synthetic fibers or refractory materials; where when m is the subscript of M, m denotes the same or different microsphere of glass or thermoplastic resin; said composites formed of one or more crystal gels or crystal gel dispersion of the same or different gel rigidity and one or more substrates of the same or different material; said crystal gel or crystal gel dispersion formed with or without

(iv) one or more of a selected polar polymer and in combination with or without

(v) one or more of a selected crystalline or non-crystalline polymer or copolymer.

10. (Twice amended) A cold weather sock, face mask, and body suit for protection of the body areas including the head, face, hand, fingers, nose, ears, neck, torso, back, arms, and foot against low temperatures and high wind velocities made from the gel composite of claim 1 for direct contact with the body and capable of substantially preventing the of generation moisture from said body and having openings for insertion and removal of one or more hydrophilic patches in selected areas of the body covered by said suit.

11. (Once amended) A cold weather wear according to claim 1, wherein said (i) block copolymer is poly(styrene-ethylene-butylene-styrene), poly(styrene-ethylene-propylene-styrene), poly(styrene-ethylene-styrene), poly(styrene-butylene-styrene), poly(styrene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-styrene), poly(styrene-butylene-ethylene/propylene-styrene), poly(styrene-butylene ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-styrene), poly(styrene-ethylene-ethylene/butylene-butylene-styrene), poly(styrene-butylene-

ethylene/propylene-butylene-styrene), poly(styrene-butylene-ethylene/butylene-butylene-styrene), poly(styrene-ethylene-butylene-ethylene/butylene-styrene), poly(styrene-ethylene-butylene-ethylene/propylene-styrene), poly(styrene-ethylene/butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene/butylene-styrene), poly(styrene-butylene-ethylene/butylene-ethylene/propylene-styrene), poly(styrene-butylene-ethylene/propylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene/propylene-butylene-ethylene/propylene-styrene), poly(styrene-butylene-ethylene/butylene-butylene-ethylene/butylene-styrene), poly(styrene-butylene-ethylene/butylene-butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/butylene-butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/propylene-butylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene-styrene), poly(styrene-butylene-ethylene/propylene-butylene-ethylene/propylene-butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene/butylene-ethylene/propylene-ethylene/butylene-butylene-styrene), poly(styrene-ethylene-butylene)n, poly(styrene-ethylene propylene)n, poly(styrene-ethylene)n, poly(styrene-butylene)n, poly(styrene-ethylene-ethylene/butylene)n, poly(styrene-ethylene-ethylene/propylene)n, poly(styrene-butylene-ethylene/propylene)n, poly(styrene-butylene-ethylene/butylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene)n, poly(styrene-ethylene-ethylene/butylene-butylene)n, poly(styrene-butylene-ethylene/propylene-butylene)n, poly(styrene-butylene-ethylene/butylene-butylene)n, poly(styrene-ethylene-butylene-ethylene/butylene)n, poly(styrene-ethylene-butylene-ethylene/propylene)n, poly(styrene-ethylene/butylene-ethylene/propylene)n, poly(styrene-ethylene-ethylene/butylene-ethylene/propylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene/butylene)n, poly(styrene-butylene-ethylene/butylene-ethylene/propylene)n, poly(styrene-butylene-ethylene/propylene-ethylene/butylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene)n, poly(styrene-ethylene/propylene-butylene-ethylene/propylene)n, poly(styrene-butylene-ethylene/butylene-butylene-ethylene/butylene)n, poly(styrene-butylene-ethylene/butylene-butylene-ethylene/propylene)n, poly(styrene-ethylene-ethylene/butylene-butylene-ethylene/propylene)n, poly(styrene-ethylene-ethylene/propylene-butylene-ethylene/butylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene)n, poly(styrene-butylene-ethylene/propylene-butylene-ethylene/propylene-butylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene/butylene)n, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene)n, or poly(styrene-ethylene-ethylene/propylene-ethylene/butylene-ethylene/propylene-ethylene/butylene-butylene)n or a mixture thereof.

12. (Once amended) A cold weather wear according to claim 1, wherein said (iv) polar polymer is ethylene-butyl acrylate, ethylene-ethyl acrylate, ethylene-methyl acrylate, ethylene-vinyl acetate, ethylene-vinyl acrylate, ethylene vinyl alcohol, acrylonitrile, styrene-acrylate, styrene-acrylonitrile, styrene-maleic anhydride, meleated poly(styrene-ethylene-propylene-styrene), meleated poly(styrene-

ethylene-butylene-styrene) or a mixture thereof.

~~13~~ 8. (Once amended) A cold weather wear according to claim 1, wherein said selected (v) crystalline or non-crystalline polymer or copolymer is poly(styrene-butadiene-styrene), poly(styrene-butadiene), poly(styrene-isoprene-styrene), poly(styrene-isoprene), poly(styrene-ethylene-propylene), low viscosity poly(styrene-ethylene-propylene-styrene), low viscosity poly(styrene-ethylene-butylene-styrene), poly(styrene-ethylene-butylene), meleated poly(styrene-ethylene-butylene-styrene), high vinyl content poly(styrene-ethylene-butylene-styrene), poly(styrene-ethylene propylene-styrene-ethylene-propylene), poly(ethylene-propylene), poly(styrene-butadiene)n, poly(styrene-butadiene)n, poly(styrene isoprene)n, poly(styrene-isoprene)n, poly(styrene-ethylene propylene)n, low viscosity poly(styrene-ethylene-propylene)n, low viscosity poly(styrene-ethylene-butylene)n, poly(styrene-ethylene-butylene)n, meleated poly(styrene-ethylene-butylene)n, high vinyl content poly(styrene-ethylene-butylene)n, poly(styrene-ethylene propylene-styrene-ethylene-propylene)n, poly(ethylene-propylene)n, polystyrene, polybutylene, poly(ethylene-propylene), poly(ethylene-butylene), polypropylene, polyethylene, polypthalamide or polyurethane elastomer formed from one or more saturated hydrocarbon diols, wherein said selected block copolymer is a linear, branched, multiarm, or ~~star shaped copolymer~~.

~~17~~ 12. (Once amended) A cold weather footwear according to claim 1 comprising:

(a) an outer boot,

(b) a [performed] preformed sock disposed in said boot, said sock being a multi-interwoven layer sock disposed in said boot, said multi-interwoven layer having one or more inner top interwoven layers impregnated with sufficient amounts of said crystal gel

so as to form a stable support and sufficient for encapsulating and sealing the skin of the foot from air and prevent the production of foot moisture.

~~19~~ 14. (Once amended) A cold weather face mask according to claim 1, for protection of said head, face, eye, and neck areas against low temperatures and high wind velocities being made from the crystal gel or crystal gel composite for direct contact with the head, face, and neck having openings for insertion and removal of one or more hydrophilic patches in selected areas covered by said mask, said eye area with or without a corrective lens or wide view visor being incorporated with a visor tri-layers of [MnGnMn or GnMnGn,] $M_nG_nM_n$ or $G_nM_nG_n$, said visor tri-layers including a polystyrene layer/gel layer/polystyrene layer, a polycarbonate layer/gel layer/polycarbonate layer, a crystalline polypropylene layer/gel layer/polypropylene layer, or a clear silicone layer/gel layer/silicone layer; said hydrophilic patches being held in place by said gel on one side and in direct contact with the skin, held in place in a slit pocket between said gel, or held in place in a foam pocket or fabric pocket layer facing the skin; said hydrophilic patches comprising a natural materials, a water absorbing polymer, a hydrogel forming polymer, a salt tolerant super absorbent, a starch modified adsorbent or a polysaccharide, a starch or a cellulose modified polymer.

~~20~~ 15. (Once amended) A cold weather wear for protecting parts of a body against cold comprising: a footwear, a sock, a face mask, a glove and a body suit for protection of one or more selected areas of said body including the head, face, forehead, eyes, ears, nose, neck, hand, fingers, arms,

underarm, torso, and back; said cold weather wear made from (I) one or more layers of a crystal gel, [(Gn)] G_n, comprising:

(i) 100 parts by weight of at least one linear, multi arm, branched, or star shaped block copolymer or a mixture thereof, said block copolymer having one or more substantially crystalline poly(ethylene) midblock in combination with one or more amorphous midblocks of poly(butylene), poly(ethylene-butylene), poly(ethylene-propylene) or a combination thereof,

(ii) about 300 to about 1,600 parts by weight of a plasticizing oil;

(II) one or more layers of an insulating crystal gel, (GnMm), comprising:

(iii) a gel dispersion of said crystal gel, [(Gn)] G_n, and a selected amount of one or more heat expandable plastic or synthetic particulates of material, [(Mm)] M_m, so as to form a homogeneous or non-homogeneous closed cell particulate gel dispersion, [(GnMm)] (G_nM_m), where when m is the subscript of M, m denotes the same or different microsphere of glass or thermoplastic resin;

(III) a combination of said crystal gel or a crystal gel composite, [GnMn or GnGn] G_nM_n or G_nG_n, with one or more layers of said insulating crystal gel; said crystal gel composite comprising: [(Gn)] G_n in adhering contact, laminated or physically interlocked with a selected material [(Mn)] M_n to form said crystal gel composite comprising combinations of [(Gn)] G_n and [(Mn)] M_n or [(Gn)] G_n and [(Gn)] G_n any sequential additions or permutations of said combinations [GnGn, MnGn, GnMnGn, MnGnMn, MnGnGn, MnMnGn, MnGnGnGn, MnMnMnGn, including MnGnGnMn, GnMnGnMn, GnGnMnGn, MnGnMnMn, MnGnMnGn, GnMnGnGn, GnMnMnGn, GnGnMnMn, GnGnMnGnMn, GnMnGnMnMn, GnMnGnMnGn, GnMnMnGnGn, GnGnGnMnMn, MnGnGnMnGn, MnGnMnGnMn, MnGnGnMnGn, GnGnMnGnMn, GnMnGnMnGn, GnGnMnGnMnGn, GnMnGnMnGnMn, GnMnMnGnGnMn, MnGnGnMnGnMn, GnGnMnMnGnGn, MnMnGnGnMnMn, MnGnGnMnGnMn, MnGnGnMnGnGn, GnGnMnGnGnMn, GnMnGnMnGn, MnMnMnGnMnMnMn, MnGnMnGnGnMn, GnMnGnMnGnMnGn, MnGnMnGnMnMnGn, GnMnMnGnMnMnGn, MnGnGnMnGnGnMn, GnGnMnGnGnMnGnGn, MnGnGnMnGnGnMnGn, GnGnMnGnGnMnGnGn, or GnMnGnMnGnMnGnMnGnMnGnMnGn,] G_nG_n, M_nG_n, $G_nM_nG_n$, $M_nG_nM_n$, $M_nG_nG_n$, $M_nM_nG_n$, $M_nG_nG_nG_n$, $M_nM_nM_nG_n$, including $M_nG_nG_nM_n$, $G_nM_nG_nM_n$, $G_nG_nM_nG_n$, $M_nG_nM_nM_n$, $M_nG_nM_nG_n$, $G_nM_nG_nG_n$, $G_nM_nM_nG_n$, $G_nG_nM_nM_n$, $G_nG_nM_nG_nM_n$, $G_nM_nG_nM_nM_n$, $G_nM_nG_nM_nG_n$, $G_nM_nM_nG_nG_n$, $G_nG_nG_nM_nM_n$, $M_nG_nG_nM_nG_n$, $M_nG_nM_nG_nM_n$, $G_nG_nM_nM_nM_n$, $G_nM_nM_nG_nM_n$, $G_nG_nG_nM_nG_nG_n$, $M_nG_nM_nG_nM_nG_n$, $G_nG_nM_nM_nG_n$, $G_nG_nM_nG_nM_nG_n$, $G_nM_nG_nM_nG_nM_n$, $G_nM_nM_nG_nG_nM_n$, $M_nG_nG_nM_nG_nM_n$, $G_nG_nM_nM_nG_nG_n$, $M_nM_nG_nG_nM_nM_n$, $M_nG_nG_nM_nG_nM_n$, $M_nG_nG_nM_nG_nG_n$, $G_nG_nM_nG_nG_nM_n$, $G_nM_nG_nM_nG_n$, $M_nM_nM_nG_nM_nM_nM_n$, $M_nG_nM_nG_nG_nM_n$, $G_nM_nG_nM_nG_nM_nG_n$, $M_nG_nM_nG_nM_nM_nG_n$, $G_nM_nG_nM_nM_nM_nG_n$, $M_nG_nG_nM_nG_nG_nM_n$, $G_nM_nG_nM_nG_nM_nG_nM_n$, $G_nG_nM_nG_nG_nM_nG_nG_n$, $M_nG_nG_nM_nG_nG_nM_n$, $G_nM_nG_nG_nM_nG_nG_nM_nG_n$, $G_nG_nM_nG_nM_nG_nM_nG_nG_n$, or $G_nM_nG_nM_nG_nM_nG_nM_nG_nM_nG_nM_nG_nM_nG_n$, where when n is a subscript of G, n denotes the same or different gel rigidity; where when n is a subscript of M, n denotes the same or different material of foam, plastic, fabric, knit fabric, yarn knit fabric, metal, wood, glass fiber, ceramics, synthetic resin, synthetic fibers or refractory materials; said insulating gel capable of being made in adhering contact, laminated or

physically interlocked with said crystal gel or said crystal gel composite, or another gel dispersion or physically interlocked with a selected substrate material, [(Mn)] M_n, to form one or more combinations of a crystal gel-gel dispersion, gel dispersion-substrate, or crystal gel substrate/gel dispersion composites including a non composite of a gel dispersion alone, or a sequential addition or permutation of said combinations of [(GnMm), (GnMm)(GnMm), (GnMm)Gn, Mn(GnMm), MnMn(GnMm), MnGnGn(GnMm), MnMnMn(GnMm), including MnGn(GnMm), (GnMm)GnMn, Gn(GnMm)Gn, Mn(GnMm)Mn, Mn(GnMm)Gn, (GnMm)GnGn, (GnMm)MnGn, Gn(GnMm)GnMn, (GnMm)GnMnMn, (GnMm)GnMnGn, (GnMm)MnGnGn, GnGn(GnMm)Mn, MnGn(GnMm)Gn, Mn(GnMm)(GnMm), Gn(GnMm)MnMn, (GnMm)Mn(GnMm), GnGn(GnMm)GnGn, Mn(GnMm)(GnMm)Gn, Gn(GnMm)MnGn, Gn(GnMm)(GnMm)Gn, (GnMm)(GnMm)(GnMm), (GnMm)MnGn(GnMm), MnGn(GnMm)(GnMm), Gn(GnMm)MnGnGn, MnMnGn(GnMm)Mn, MnGn(GnMm)(GnMm), MnGn(GnMm)GnGn, Gn(GnMm)Gn(GnMm), (GnMm)(GnMm)Gn, MnMnMn(GnMm)MnMn, Mn(GnMm)Gn(GnMm), Mn(GnMm)(GnMm)MnGn, (GnMm)Mn(GnMm)MnGn, MnGn(GnMm)Gn(GnMm), MnGn(GnMm)Gn(GnMm),(GnMm)(GnMm)(GnMm)Gn, Gn(GnMm)MnGn(GnMm)Mn, Gn(GnMm)Gn(GnMm)GnGn, (GnMm)(GnMm)(GnMm)(GnMm), (GnMm)Gn(GnMm)Gn(GnMm)Gn, Gn(GnMm)(GnMm)(GnMm)GnGn, or (GnMm)(GnMm)(GnMm)(GnMm)(GnMm)Gn;](G_nM_m), (G_nM_m)(G_nM_m), (G_nM_m)G_n, M_n(G_nM_m), M_nM_n(G_nM_m), $M_nG_nG_n$(G_nM_m), $M_nM_nM_n$(G_nM_m), including M_nG_n(G_nM_m), (G_nM_m)G_nM_n, G_n(G_nM_m)G_n, M_n(G_nM_m)M_n, M_n(G_nM_m)G_n, (G_nM_m)G_nG_n, (G_nM_m)M_nG_n, G_n(G_nM_m)G_nM_n, (G_nM_m)$G_nM_nM_n$, (G_nM_m)$G_nM_nG_n$, (G_nM_m)$M_nG_nG_n$, G_nG_n(G_nM_m)M_n, M_nG_n(G_nM_m)G_n, M_n(G_nM_m)(G_nM_m), G_n(G_nM_m)M_nM_n, (G_nM_m)M_n(G_nM_m), G_nG_n(G_nM_m)G_nG_n, M_n(G_nM_m)(G_nM_m)G_n, G_n(G_nM_m)M_nG_n, G_n(G_nM_m)(G_nM_m)G_n, (G_nM_m)(G_nM_m)(G_nM_m), (G_nM_m)M_nG_n(G_nM_m), M_nG_n(G_nM_m)G_nG_n, G_n(G_nM_m)G_n(G_nM_m), (G_nM_m)(G_nM_m)G_n, $M_nM_nM_n$(G_nM_m)M_nM_n, M_n(G_nM_m)G_n(G_nM_m), M_n(G_nM_m)(G_nM_m)M_nG_n, (G_nM_m)M_n(G_nM_m)M_nG_n, M_nG_n(G_nM_m)G_n(G_nM_m), M_nG_n(G_nM_m)G_n(G_nM_m), (G_nM_m)(G_nM_m)(G_nM_m)G_n, G_n(G_nM_m)M_nG_n(G_nM_m)M_n, G_n(G_nM_m)G_n(G_nM_m)G_nG_n, (G_nM_m)(G_nM_m)(G_nM_m)(G_nM_m), (G_nM_m)G_n(G_nM_m)G_n(G_nM_m)G_n, G_n(G_nM_m)(G_nM_m)(G_nM_m)G_nG_n, or (G_nM_m)(G_nM_m)(G_nM_m)(G_nM_m)(G_nM_m)G_n; said crystal gel composites formed of one or more crystal gels or gel dispersion of the same or different gel rigidity and one or more substrates of the same or different material; said crystal gel having a gel rigidity of from about 20 to about 1,000 gram Bloom, said gel dispersion, [(GnMm)](G_nM_m), having a gel rigidity of from 50 to about 3,000 gram Bloom, said crystal gel and said insulating gel having an elongation of at least 200%; said crystal gel or gel dispersion formed with or without

(iv) one or more of a selected polar polymer and in combination with or without

(v) one or more of a selected crystalline or non-crystalline polymer or copolymer;

(vi) said crystal gel being applied with or without one or more antiperspirant agents, deodorant agents, antibacterial agents, antifungal agents, or hydrophobic agents, or a combination of said agents.